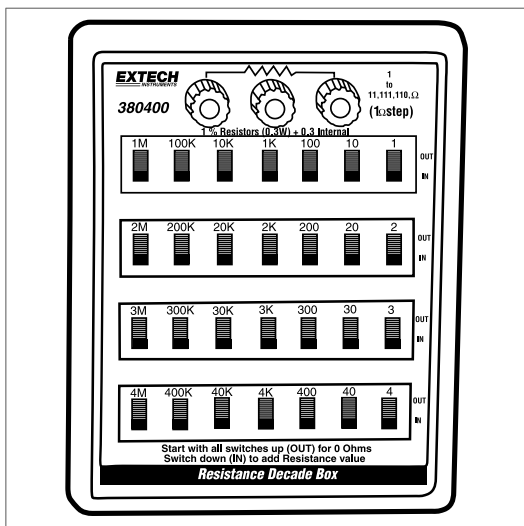


# Resistance Decade Box

MODEL 380400



# Introduction

Congratulations on your purchase of the Extech 380400 Resistance Decade Box. This device offers 7 decades of resistance ranges from 1  $\Omega$  to over 11 M $\Omega$  (in 1  $\Omega$  steps). Slide switches allow easy addition and subtraction of resistance values. Binding posts (3) offer simple and secure connections. Careful use of this device will provide years of reliable service.

## Specifications

Ranges	1 to 11,111,110 $\Omega$ in 1 $\Omega$ steps
Internal resistance	0.3 $\Omega$
Power rating	0.3 W resistors
Connections	Three (3) binding posts
Accuracy	$\pm$ (1 % of reading + 0.3 $\Omega$ )
Operating conditions	32 to 122°F (0 to 50°C); < 80% RH
Dimensions / Weight	147 x 117 x 51 mm (5.79 x 4.61 x 2.01 in.) 330 g (0.73 lbs.)

## Operation

### Binding Post Connections

The binding posts can be used for connections in several ways:

1. A banana plug can be inserted directly into the posts.
2. Bare wire can be threaded through the post after it has been unscrewed. Once the bare wire is threaded, tighten the posts as necessary.
3. Alligator clips can be used, but use caution not to strip the post threads or the plastic post housing.

The resistance is available on the RED and the BLACK binding posts. The WHITE post is case ground. Connect the positive lead of the device under test to the RED post. Connect the negative lead to the BLACK post. Use the WHITE grounding post only if the device under test will be grounded to the 380400 case.

## Range Selection

The 28 front panel switches are used to select the resistance available on the RED and BLACK terminals. When a switch is set to the IN position, the value printed above the switch is added to the total resistance. When the switch is set to OUT it is excluded from the total resistance. If all of the switches are set to OUT, the total resistance is zero ( $\pm 0.3 \Omega$  internal resistance, approx.).

For example, if the desired resistance is 10.5 k $\Omega$ , set the following switches to the IN position: 10 k $\Omega$ , 400  $\Omega$ , and 100  $\Omega$ .

## Verification Testing

This device can be used to verify the calibration integrity of multi-meters, LCR meters, and calibrators, for example. Connect to the box as described above and set the resistance switches to the desired resistance. Ensure that the voltage supplied by the device under test does not overload the box's 0.3 W internal resistor power. The device under test should read the value of resistance selected on the box. If it does not, the device under test may need calibration or service.

# Customer Support

Local Telephone Support List	<a href="https://support.flir.com/contact">https://support.flir.com/contact</a>
Return Material Authorization (RMA)	<a href="https://customer.flir.com/Home">https://customer.flir.com/Home</a>
Customer Support	<a href="https://support.flir.com/ContactService">https://support.flir.com/ContactService</a>
Technical Support	<a href="https://support.flir.com">https://support.flir.com</a>

FLIR Systems, Inc. offers calibration and repair services for the Extech brand products we sell. We offer NIST traceable calibration for most of our products.

## Warranty

FLIR Systems, Inc. warrants this Extech brand instrument to be free of defects in parts and workmanship for two (2) years from date of purchase. To view the full warranty, please visit the site below.

<https://www.extech.com/support/warranties>





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